

REMARKS

In response to Examiner's requirement, the title of the application has been amended.

The specification has been amended at paragraph [0023] to add reference number **415** from drawing FIG. 4 that was inadvertently omitted from the text and change reference number **415** to the correct reference number **410**.

With the amendment to the specification, the objection to the drawings is moot and Applicant requests reconsideration and withdrawal.

Claims 1-13 were presented for examination. All claims were rejected.

Claims 2-5 and 8 have been canceled.

Claim 1 and claims 6-7 and 9-13 dependent therefrom have been amended.

Claim 1 has been amended to more distinctly claim the invention that is the subject of this application. Amendment is made by incorporating the substance of claims 2-5 therein. No new matter has been added.

Claim 6 has been amended to be more succinct.

Claims 7, 9, 12 and 13 have been amended in response to Examiner's claim objection.

Support for the amendment to claim 10 is found at paragraph [0024]. No new matter has been added.

Support for the amendments to claims 11 and 12 and new claim 14 is found at paragraph [0019]. No new matter has been added.

Claim Objections

Claims 5, 7-9 and 12-13 are objected to because of various informalities. The informalities have been cured either by cancellation (claim 5) or by amendment and Applicant requests withdrawal of the objection.

Rejection under 35 USC §102

Claims 1, 2, 6-8, 10, 11 and 13 are rejected under 35 USC §102(a) as being anticipated by Maher (6,838,680). Applicant traverses the rejection.

As amended, claim 1 now recites a modular optical detector system that includes two modules. The first optics module comprises, in part, an excitation source, wherein the components of the excitation source (light source, collimating optics and filter) are demountably engaged on a dovetail rail, such that the components of the excitation source are maintained in a fixed and stable orientation so that established alignment can be maintained if the rail assembly or any of its components are replaced ([0023]). The second detector module contains detection means for receiving and analyzing emitted radiation.

Maher is drawn to an optical and orientation device comprising a housing having an excitation source, an optical element for reflecting excitation light to an aspherical lens and transmitting light emitted by an excited fluorophore, a focusing lens for focusing emitted light into the entry of an optical fiber serving as a confocal aperture and a lever (140) for accurately moving housing (110) over a small area in relation to a channel in a microfluidic device (abstract and FIG. 1). Nowhere does Maher teach or describe the claimed limitation wherein the components of the excitation source of the first optics element are demountably engaged on a dovetail rail, such that the components of the excitation source are maintained in a fixed and stable orientation nor is the claimed limitation inherent in Maher.

It is well settled that a reference can anticipate a claim only if each and every element, as set forth in the claim is found, either explicitly or inherently, as described in the reference. As Applicant has shown above such is not the case here. Therefore, Applicant urges that a *prima facie* of anticipation not having been made that the rejection of claim 1 and claims 2, 6-8, 10, 11 and 13 dependent therefrom under 35 USC §102(a) be reconsidered and withdrawn.

Rejection under 35 USC §103

Claims 3-5, 9 and 12 are rejected under 35 USC §103(a) as being unpatentable over Maher (6,838,680). Applicant traverses the rejection.

Claims 3-5 having been canceled the rejection of those claims is now moot. However, since the substance of claims 3-5 has been incorporated into base claim 1, response will be made in reference to the claimed limitations of claim 1.

As noted above, claim 1 claims a first optics module that comprises, in part, an excitation source, wherein the components of the excitation source are demountably engaged on a dovetail rail, such that the components of the excitation source are maintained in a fixed and stable orientation. In rejecting claim 5 Examiner cites Maher as disclosing the claimed structure (FIG. 1 numerals **122** and **135** engaged on lever arm **140**). In fact, what Maher discloses in the cited figure is two couplers (**122** and **135**) for coupling an optical fiber to housing **120**. The housing that contains couplers **122** and **135** is itself connected to lever arm **140** that is, in turn, part of an orientation device **136** and serves to orient the housing in relation to emitted radiation (col. 8, 55-67 and col. 9, 1-50). Nowhere does Maher teach or suggest the claimed dovetail rail structure to maintain the components in a fixed and stable orientation, which, Applicant has defined to mean, that the established alignment can be maintained if the rail assembly or any of its components are replaced (**[0023]**). It is obvious from careful examination of Maher that the cited structure not only does not contain the claimed components but also there is no provision for maintaining a fixed and stable orientation particularly if components are replaced.

Finally, Applicants note that claim 12 now claims a beam steering mirror system for conditioning the light and that the beam conditioning mirror system is a 4 mirror system (claim 14). By Examiner's admission Maher neither discloses a beam steering mirror system nor a 4 mirror, as claimed. An attempt to overcome this omission is made by stating that the claimed limitations would be obvious to one of ordinary skill in the

art. It is well established that the mere fact that a reference can be modified does not render the combination obvious unless the prior art also suggests the desirability thereof (cf. MPEP 2143.01 and references therein). Moreover, referring now to FIGS. 1-7 of the cited reference, it is not at all clear that the modification suggested by the Examiner could be made to Maher without rendering it unsatisfactory for its intended purpose.


It is well settled that to establish a *prima facie* case of obviousness all the claim limitations must be taught or suggested by the prior art and that the claimed invention as a whole must be considered. As Applicant has shown above, such is not the case here. Consequently, Applicant requests reconsideration and withdrawal of the rejection of claims 9 and 12 under 35 USC §103.

CONCLUSION

The objection to claims 7-9 and 12 and 13 having been cured, the rejection of claims 1, 6-8, 10, 11 and 13 under 35 USC §102 and the rejection of claims 9 and 12 under 35 USC §103 having been overcome, Applicant respectfully requests reconsideration and withdrawal of the rejections, entry of new claim 14 and that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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Application No: 10/633,794

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